

REMARKS

Applicants have studied the Office Action of December 18, 2003 ("Office Action"). It is respectfully submitted that the application is in condition for allowance. Claims 42-54 and 56-64 are pending in the present application. Claims 1-20, 25-30, 36-38 and 42-61 were rejected in the Office Action; claims 39-41 and 62-64 have been indicated as withdrawn from consideration. Claims 1-42 and 55 have been canceled and claims 42 and 56-60 have been amended by virtue of the present amendment. No new matter has been added. Allowance of the application in view of Applicants' amendment and the ensuing remarks is respectfully requested.

Claims 42 and 56-60 have each been amended to more particularly point out that which Applicants regard as their invention. As amended, each of these claims describes a null mutant mouse that includes, in its germ cells, an artificially induced PTTG null mutation on both PTTG alleles. The mutant mouse described in each of these claims, as amended, additionally exhibits one of the phenotypes described in the specification (*i.e.*, hyperglycemia, hypoinsulinaemia, hypoleptinemia, diabetes, chromosomal aneuploidy, premature centromere division, chromosomal damage, aberrant mitotic cellular division, thrombocytopenia, thymic hyperplasia, splenic hypoplasia, testicular hypoplasia or female subfertility); the only exception is Applicants' claim 59, which, as amended, describes a homozygous null mutant mouse specifically exhibiting diabetes. Support for these amendments may be found throughout the specification; for example, at page 9, lines 19-25 and at page 24, lines 5-10.

In the Office Action, Examiner rejected claims 1-20, 25-30, 36-38 and 42-61 under 35 U.S.C. § 112, first paragraph, as lacking enablement. In particular, Examiner found that "*the specification, while being enabling for the production of a null mutant mouse having null mutation on both pituitary tumor transforming gene (PTTG) alleles in the germ cells and having the phenotypes as disclosed in the specification . . . does not reasonably provide enablement for production of any null mutant rodent having null mutation on one or both PTTG alleles other than the disclosed null mutant mice . . . and the use of said null mutant rodent in the study of mammalian physiology at the cellular, tissue, or organismal level.*" With respect to claims 1-20, 25-30, 36-38 and 55, which have been canceled by virtue of the present amendment, this

rejection is rendered moot. With respect to the remaining claims, this rejection is respectfully traversed.

As amended, each of Applicants' independent claims (*i.e.*, claims 42 and 56-60) now describes a null mutant mouse with a null mutation on both PTTG alleles in the germ cells. Additionally, these null mutant mice each have at least one of the phenotypes disclosed in the specification (*i.e.*, hyperglycemia, hypoinsulinaemia, hypoleptinemia, diabetes, chromosomal aneuploidy, premature centromere division, chromosomal damage, aberrant mitotic cellular division, thrombocytopenia, thymic hyperplasia, splenic hypoplasia, testicular hypoplasia or female subfertility). As such, Applicants respectfully submit that claims 42 and 56-60, as amended, along with each of the claims that depend therefrom are properly enabled, and therefore respectfully request withdrawal of this rejection under 35 U.S.C. § 112, first paragraph.

In the office action dated January 29, 2003, Examiner required election among five embodiments of Applicants' invention; identified as Groups I, II, III, IV and V. Applicants elected the claims of Group I for prosecution on the merits. In that office action, Examiner indicated that Applicants' original claim 1 linked the embodiments of their invention described in Group I to Groups III, IV and V, and further indicated that Applicants' original claims 27-31 linked the embodiments of their invention described in Groups III, IV and V to one another. Although each of these original linking claims has since been canceled, for purposes of restriction practice, Applicants' pending claims 56, 57, 58 and 60 are substantively similar to Applicants' original linking claims 28, 29, 30 and 31. Furthermore, Applicants' pending claims 62, 63 and 64 are substantively similar to Applicants' original claims 33, 34 and 35, which described the particular features of the restricted subject matter in Groups III, IV and V, respectively.

Applicants respectfully submit that claims 56-58 and 60 are each allowable, and therefore submit that the non-elected embodiments of their invention described in pending claims 62-64 must be rejoined and fully examined for patentability under 37 CFR 1.104 (MPEP § 809.04).

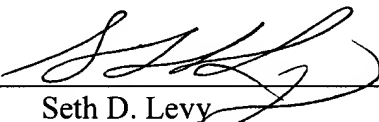
Finally, Applicants note that a *Power of Attorney from Assignee and Revocation of Prior Powers* was submitted with their earlier amendment, filed on October 21, 2003. However, the present Office Action was sent to the law firm that had previously been responsible for prosecution of this application. Applicants have once again enclosed a copy of this Power of Attorney, and respectfully request that all future correspondence in connection with this matter be forwarded directly to the undersigned.

Applicants believe that the present amendment and foregoing remarks place the application in condition for allowance. A favorable action is respectfully requested. If for any reason Examiner finds the application other than in condition for allowance, Examiner is requested to call the undersigned attorney at the Los Angeles telephone number (213) 488-7100 to discuss the steps necessary for placing the application in condition for allowance.

Respectfully submitted,
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Date: February 27, 2004

By: _____


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Enclosure: *Copy of Power of Attorney from Assignee and Revocation of Prior Powers*